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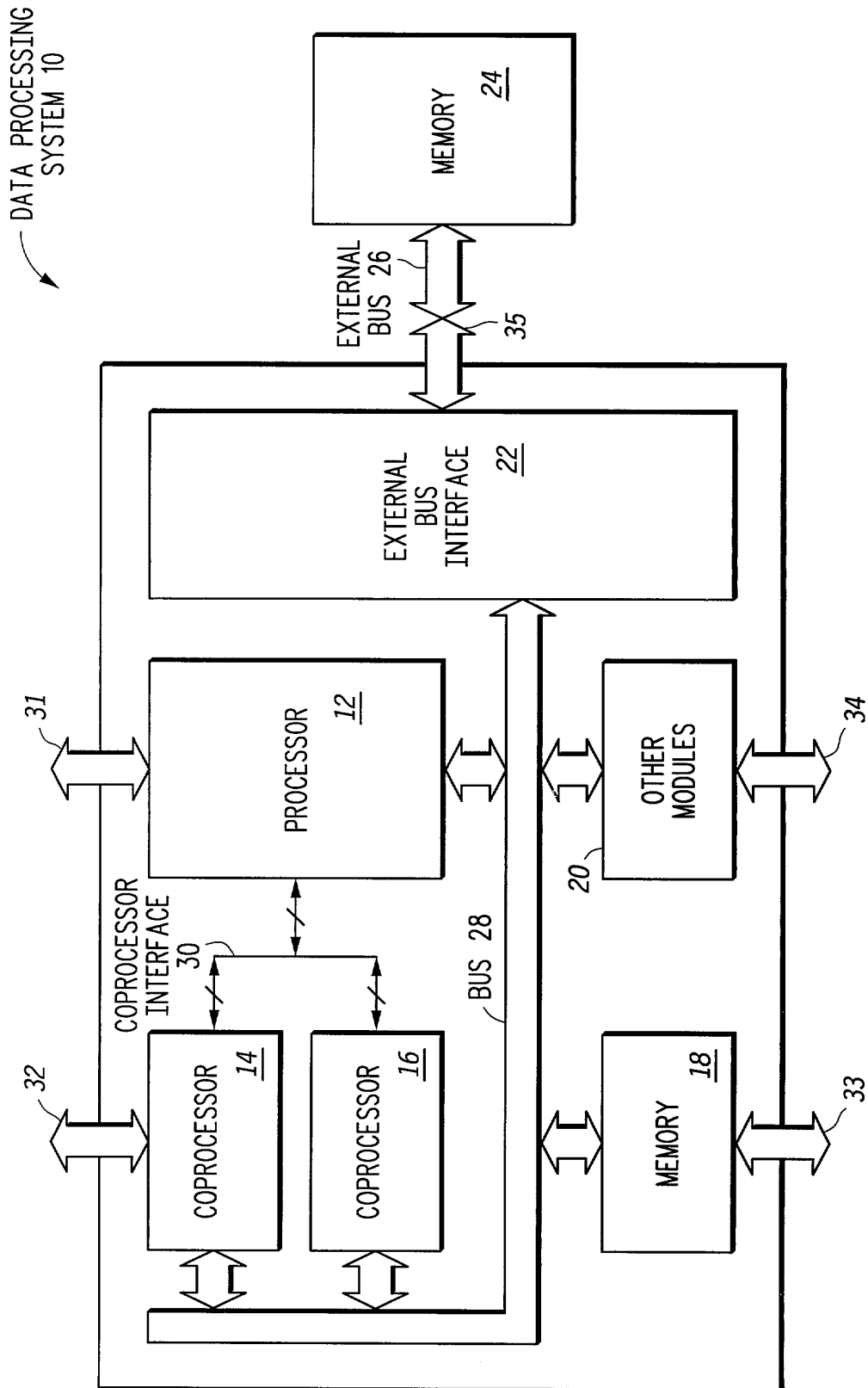


FIG. 1

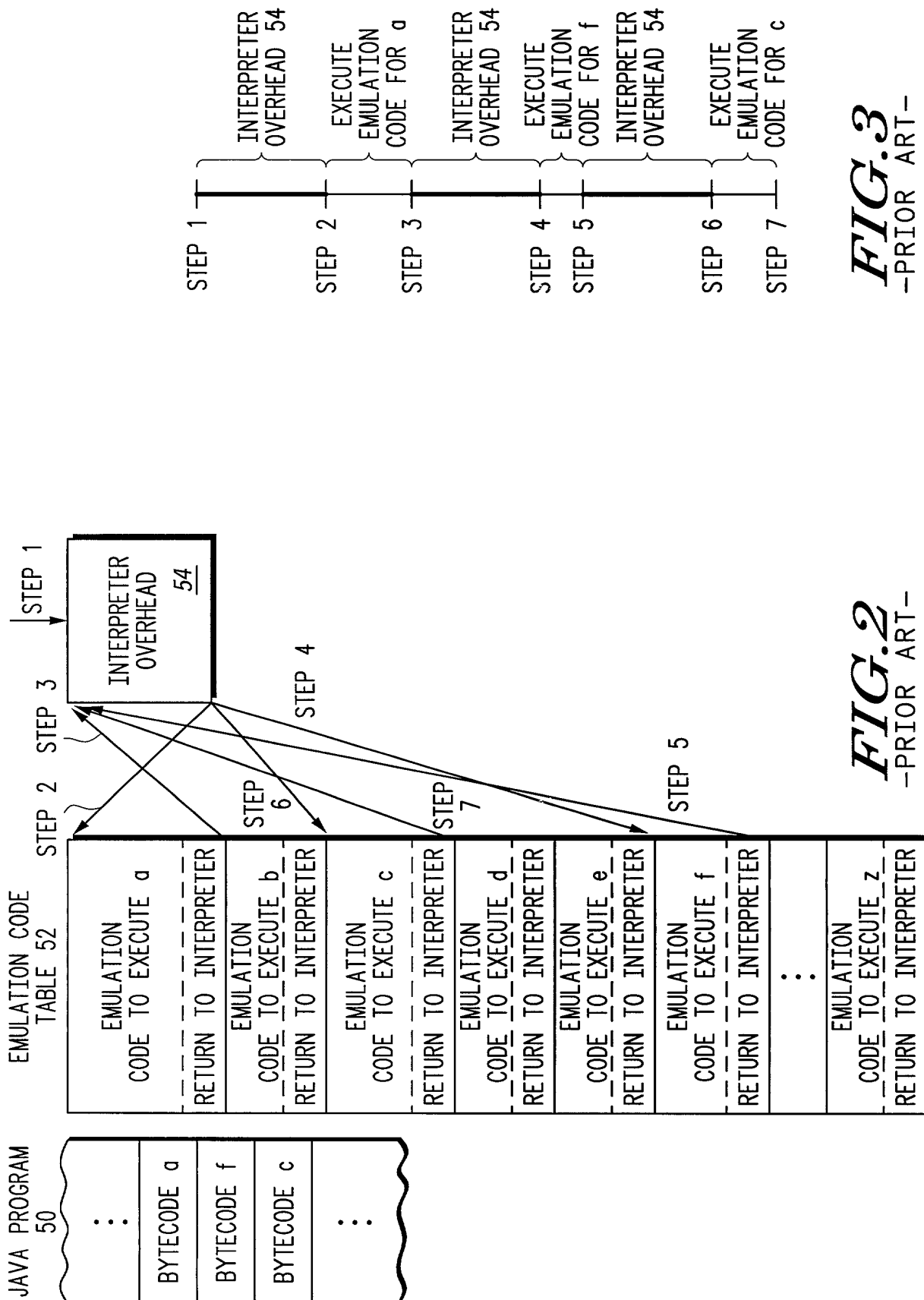


FIG. 3

-PRIOR ART-

FIG. 2

-PRIOR ART-

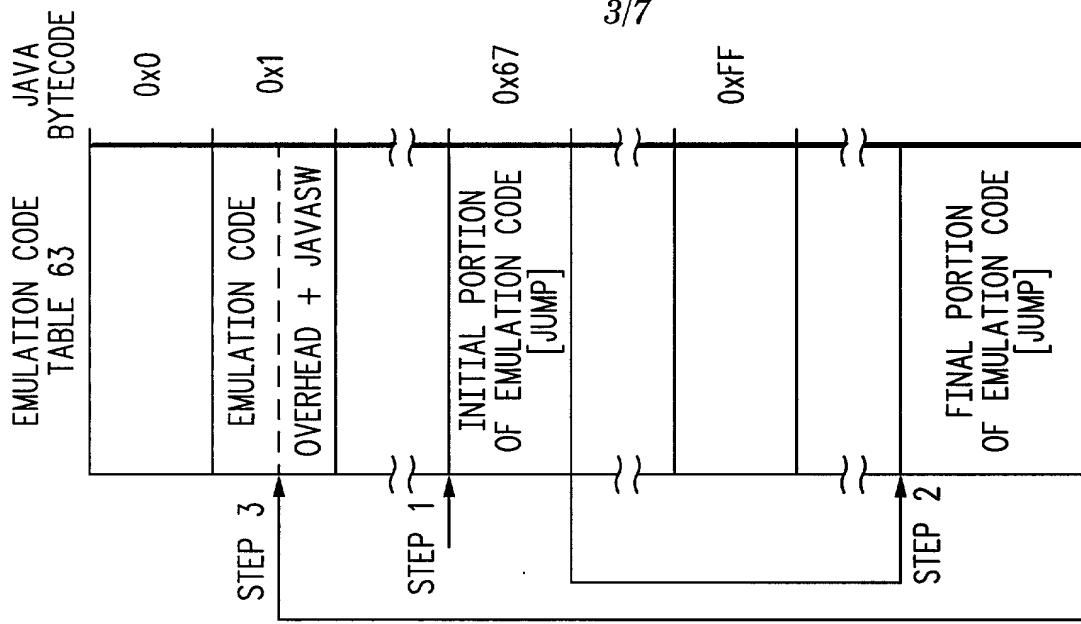


FIG. 5

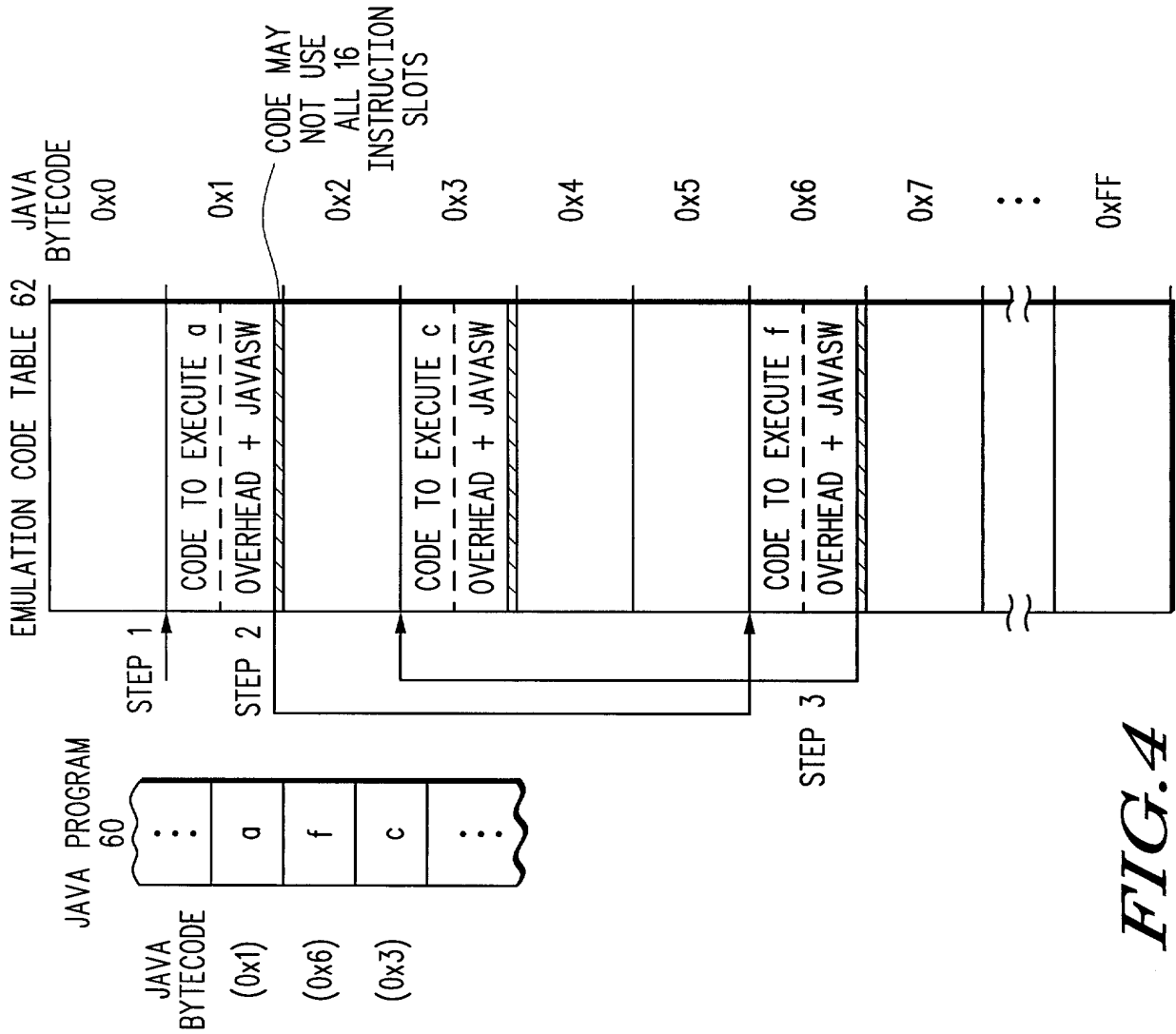


FIG. 4

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EMULATION CODE
TABLE 72

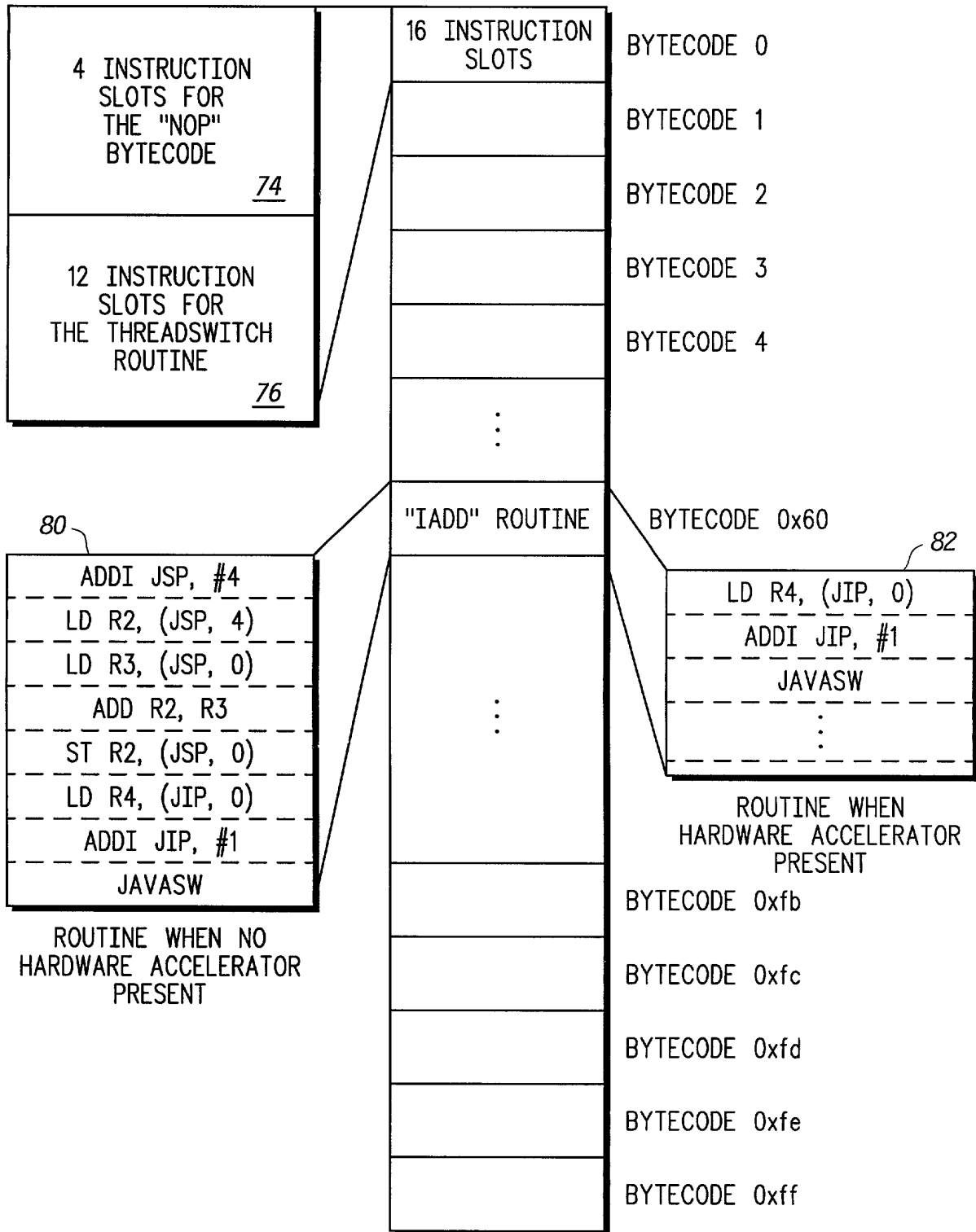


FIG. 6

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JAVASW

JAVA INTERPRETER SWITCH

OPERATION: JUMP TO BYTECODE EMULATION SEQUENCE;

91 — IF (SWCOUNT!<0)

92 — $PC \leftarrow -[(((PC+2) \& 0xffffe000) \mid (R4 \ll 5))];$

93 — ELSE

94 — $PC \leftarrow -[(((PC+2) \& 0xffffe000) \mid (0x8))];$

95 — SWCOUNT--;

ASSEMBLER

SYNTAX: JAVASW RX

DESCRIPTION: JUMP TO BYTECODE EMULATION SEQUENCE. THE LOW ORDER 13 BITS OF THE VALUE OF PC+2 ARE FORCED TO ZERO, AND BASED ON THE STATE OF THE SWCOUNT (IN REGISTER R12), EITHER A SCALED VALUE IN REGISTER RX IS LOGICALLY "OR'ED", OR A CONSTANT VALUE 0x8 OR'ED, AND INSTRUCTION EXECUTION RESUMES AT THE NEW PC VALUE. THE SWCOUNT REGISTER R12 IS DECREMENTED. NOTE THAT BECAUSE PC+2 IS USED AS THE BASE VALUE, A JAVASW INSTRUCTION SHOULD NOT BE USED IN THE LAST INSTRUCTION OF INSTRUCTION GROUP 255.

CONDITION CODE: UNAFFECTED

INSTRUCTION FORMAT:

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0

INSTRUCTION FIELDS:

JAVA INTERPRETER SWITCH SUPPORT IS PROVIDED BY THE JAVASW INSTRUCTION. THIS INSTRUCTION CAUSES CONTROL FLOW TO BE DIRECTED INTO A TABLE OF INSTRUCTION GROUPS. MOST GROUPS CONSISTS OF 16 INSTRUCTIONS AND CORRESPOND TO A SINGLE JAVA BYTECODE.

FIG. 7

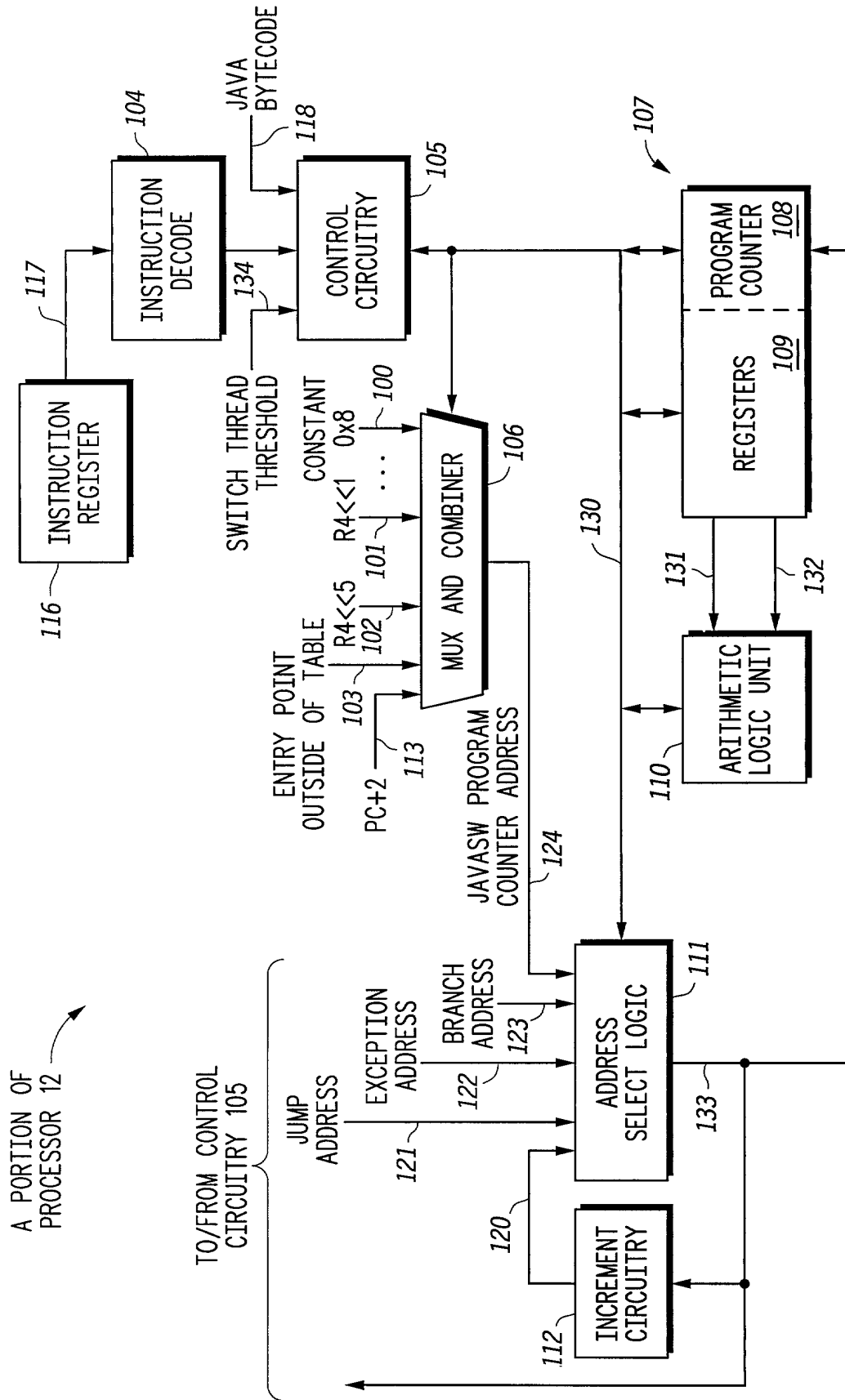


FIG. 8

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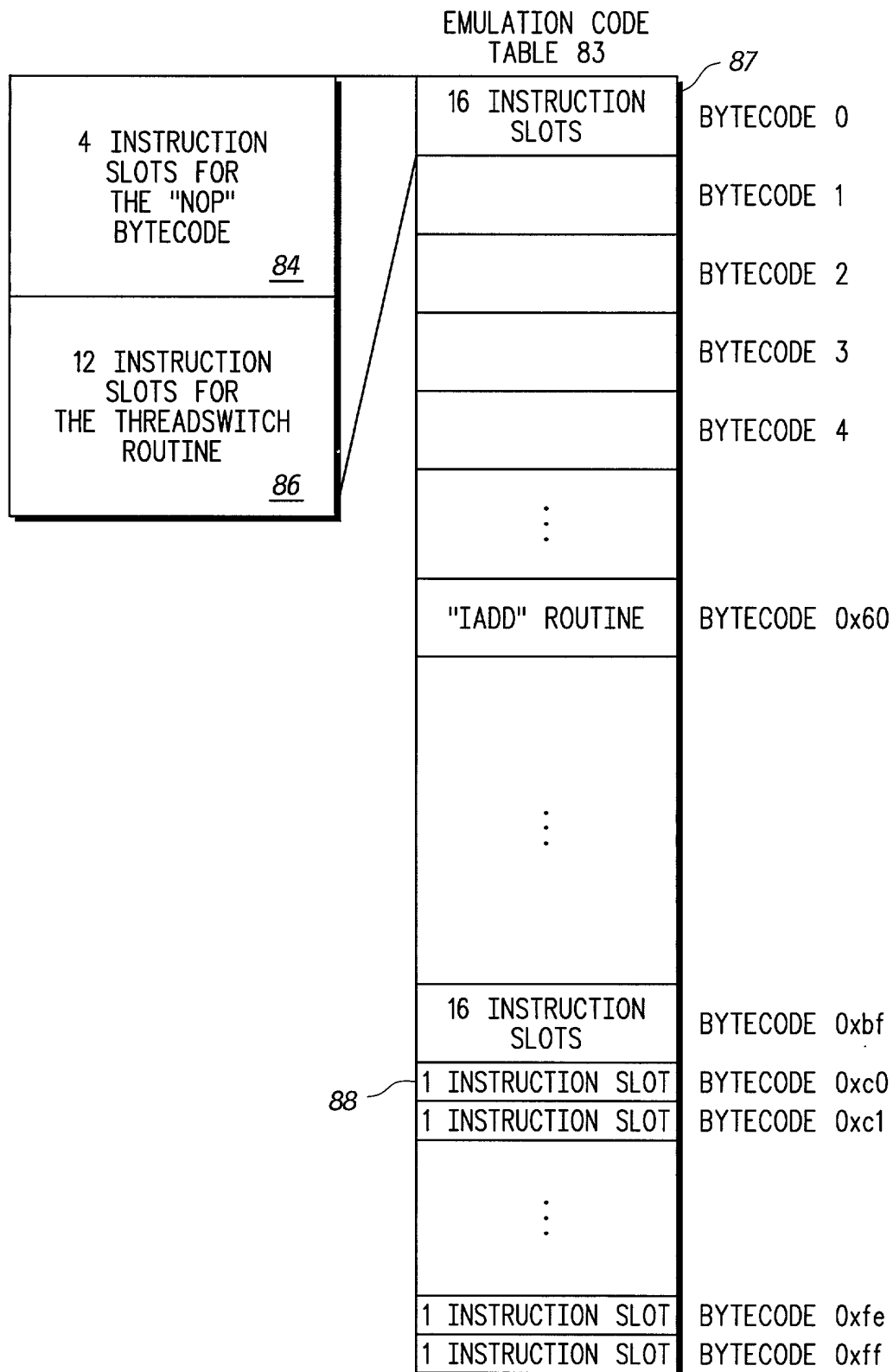


FIG. 9